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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/716,335 | 11/18/2003 | Tsutomu Namie | 1382-TC-393-DIV | 5221 |
| 110 | 7590 | 06/18/2004 | EXAMINER | |
| DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307 | | | JOHNSON, VICKY A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3682 | |

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

10/716,335

Applicant(s)

NAMIE ET AL.

Examiner

Vicky A. Johnson

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/18/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/103902.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/18/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/103,902, filed on 3/22/2002.

Election/Restrictions

2. Applicant's election without traverse of Figure 5 in the paper filed November 18, 2003 is acknowledged.
3. Claim 6 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 43. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: on page 6 line 18 there is an inconsistency in the specification "through-hole 9a" should be --through-hole 9a'--; on page 8 line 36 there is an inconsistency in the specification "numeral 9d'" should be --numeral 19d'-- Appropriate correction is required.

Claim Objections

6. Claim 5 is objected to because of the following informalities: in line 5 there is a comma in between the w and l of the word pawl. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dembosky et al (US 5,967,920) in view of Simpson et al (US 5,967,921).

Dembosky et al disclose a tensioner comprising: a body (102) of the tensioner, a metallic cylinder (105) fit into a circular hole (104) formed in the body of the tensioner, a plunger (130) inserted into the cylinder (see Fig 4), the front end portion of the plunger being protruded from the body by a compression spring (170) provided in the cylinder, a pressure oil chamber (180) formed between the inside of the plunger and the cylinder (see Fig 4), and a check valve mechanism that allows the flowing of oil into the pressure oil chamber but blocks the back flow of the oil (col. 5 line 65 – col. 6 line 14), the bottom portion of the circular hole having a through hole (103a) in the body, and the check valve mechanism comprising a separate ball seat (col. 6 lines 9 and 10), a check ball (214), a spring (212), and a retainer (200).

Dembosky et al does not disclose the body of the tensioner being made of plastics.

Simpson et al disclose the body of the tensioner is made of plastic and the cylinder is made of metal (col. 4 lines 30-48).

It would have been obvious to one having ordinary skill in the art at the invention was made to modify the body of the tensioner of Dembosky et al to be made of plastics as taught by Simpson et al in order to reduce cost (col. 3 line 29-39).

Re claim 2, Dembosky et al show the cylinder has a cylinder body and the retainer are integrally formed ((see Fig 4), the cylinder 105 and the retainer 202 are integral with each other; the term "integral" being broadly interpreted,), and the retainer of the cylinder is press-fit into the ball seat (see col. 5 lines 3, 4, and 57-60).

Re claim 4, Dembosky et al show the through hole is a small diameter circular hole formed in the bottom portion of the circular hole (see Fig 4), and the separate ball seat is fitted into the small diameter circular hole (col. 6 lines 9 and 10), and the retainer is press fit onto the ball seat (col. 5 lines 57-60).

Re claim 7, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the hollow cup shaped cylinder and the retainer as one-piece, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard vs. Detroit Stove Works*, 150 U.S. 164 (1893).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dembosky et al (US 5,967,920) in view of Simpson et al (US 5,967,921) as applied to claims 1 and 2 above, and further in view of Sanford (US 3,491,790).

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Dembosky et al disclose a tensioner as described above, but do not disclose the ball seat is fit onto a cylindrical protruded portion raised on the bottom portion of the circular hole.

Sanford discloses a ball seat (23) fit onto a cylindrical protruded portion (20) raised on the bottom portion of the circular hole (see Fig 6), and Dembosky et al show the retainer is press fit on the ball seat whereby the cylinder is held in the circular hole (see col. 5 lines 3, 4, and 57-60).

It would have been obvious to one having ordinary skill in the art at the invention was made to modify the tensioner of Dembosky et al to include a ball seat fit onto a protruded portion as taught by Sanford in order to reduce cost (col. 2 lines 18-23).

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dembosky et al (US 5,967,920) in view of Simpson et al (US 5,967,921) as applied to claims 1 and 2 above, and further in view of Hashimoto et al (US 2002/0098932).

Dembosky et al disclose a tensioner as described above, but do not disclose the tensioner including a backward displacement device comprising ratchet teeth on an outer circumferential surface of the plunger, a pivotally mounted ratchet pawl, and a spring bias to engage the pawl with the ratchet teeth.

Hashimoto et al discloses a tensioner (31) including a backward displacement device comprising ratchet teeth (35A) on an outer circumferential surface of the plunger (35), a pivotally mounted ratchet pawl (40), and a spring (41) bias to engage the pawl with the ratchet teeth.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Dembosky et al to include a backward displacement device as taught by Hashimoto et al in order to prevent backward displacement of the plunger and maintain the proper tension on the chain (see paragraph 18).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 2004/0092350 Hashimoto et al (made of plastic and metal).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (703) 305-3013. The examiner can normally be reached on Monday-Thursday (7:00a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vaj

6/10/04

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DAVID A. BUCCI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600